

**PATENT COOPERATION TREATY**  
**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
 (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference<br><b>P037263-PO</b>   | FOR FURTHER ACTION   | See Form PCT/IPEA/416  |
| International application No.<br><b>PCT/JP2005/000523</b>  | International filing date ( <i>day/month/year</i> )<br><b>18.01.2005</b> | Priority date ( <i>day/month/year</i> )<br><b>19.01.2004</b> |
| International Patent Classification (IPC) or national classification and IPC<br><b>G11B20/12 (2006.01), G11B7/004 (2006.01), G11B20/10 (2006.01)</b> |  |  |
| Applicant<br><b>MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.</b>   |  |  |

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|---|--|
| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <ul style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>2</u> sheets, as follows:             <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</li> <li><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</li> </ul> </li> <li>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</li> </ul> |  |
| <p>4. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Box No. I Basis of the report</li> <li><input type="checkbox"/> Box No. II Priority</li> <li><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li><input type="checkbox"/> Box No. IV Lack of unity of invention</li> <li><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li><input type="checkbox"/> Box No. VI Certain documents cited</li> <li><input type="checkbox"/> Box No. VII Certain defects in the international application</li> <li><input type="checkbox"/> Box No. VIII Certain observations on the international application</li> </ul>  |  |

|   |                                   |
|---|-----------------------------------|
| Date of submission of the demand        | Date of completion of this report |
| Name and mailing address of the IPEA/JP | Authorized officer                |
| Facsimile No.                           | Telephone No.                     |

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2005/000523

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:

- international search (Rule 12.3 and 23.1(b))
- publication of the international application (Rule 12.4)
- international preliminary examination (Rule 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

the international application as originally filed/furnished  
 the description:  
 pages 1-30 \_\_\_\_\_ as originally filed/furnished  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

the claims:  
 nos. 1-4, 6-10 \_\_\_\_\_ as originally filed/furnished  
 nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
 nos.\* 5, 11, 12 \_\_\_\_\_ received by this Authority on 16.11.2005  
 nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

the drawings:  
 sheets fig. 1-18 \_\_\_\_\_ as originally filed/furnished  
 sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3.  The amendments have resulted in the cancellation of:

- the description, pages \_\_\_\_\_
- the claims, nos. \_\_\_\_\_
- the drawings, sheets/figs \_\_\_\_\_
- the sequence listing (*specify*): \_\_\_\_\_
- any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- the description, pages \_\_\_\_\_
- the claims, nos. \_\_\_\_\_
- the drawings, sheets/figs \_\_\_\_\_
- the sequence listing (*specify*): \_\_\_\_\_
- any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

|                               |        |      |     |
|-------------------------------|--------|------|-----|
| Novelty (N)                   | Claims | 1-12 | YES |
|                               | Claims |      | NO  |
| Inventive step (IS)           | Claims |      | YES |
|                               | Claims | 1-12 | NO  |
| Industrial applicability (IA) | Claims | 1-12 | YES |
|                               | Claims |      | NO  |

**2. Citations and explanations (Rule 70.7)**

Document 1: JP 2002-279722 A (Toshiba Corp.), 27 September 2002, paragraphs [0015] to [0028] and fig. 1 and 2 & US 2002/0131335 A1

Document 2: JP 09-245417 A (Mitsubishi Electric Corp.), 19 September 1997, paragraphs [0025] to [0050] and fig. 1 to 8

Document 3: JP 11-185390 A (Mitsubishi Electric Corp.), 09 July 1999, paragraph [0037] & US 2002/0159382 A1

Document 4: JP 2002-203376 A (Matsushita Electric Ind. Co., Ltd.), 19 July 2002, paragraph [0081] & WO 2002/037491 A1

Document 5: JP 09-161387 A (NEC Corp.), 20 June 1997, paragraphs [0011] to [0017] and fig. 1 to 3 & US 5745461 A

Document 6: JP 2002-216455 A (Sharp Corp.), 02 August 2002, paragraphs [0158] to [0160] and fig. 14 and 15 & US 2002/0093900 A1

Document 7: JP 09-320184 A (Mitsubishi Electric Corp.), 12 December 1997, paragraphs [0028] to [0050] and fig. 1 to 11

Document 8: JP 2002-032975 A (Sony Corp.), 31 January 2002, paragraphs [0047] to [0050] and fig. 2

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citations and explanations supporting such statement

& US 2002/0048223 A1

The inventions set forth in claims 1 to 3, 10 and 12 do not involve an inventive step in the light of documents 1 to 4. The technical feature wherein the size of the spare area that is allocated in the place of defect sectors is set to '0' is well known, as disclosed in documents 3 and 4 for example, and thus it would have been easy for a person skilled in the art to conceive of applying the technical feature disclosed in document 2, wherein the substitute regions are allocated so that a disk that has been extracted from its cartridge will have a larger substitute region than a disk that has not been extracted from its cartridge, when configuring the cartridge-type disks that are stored and manipulated within a cartridge and the disks that are manipulated without a cartridge in the invention disclosed in document 1.

In addition, techniques for identifying whether a disk is a cartridge-type disk that is stored and manipulated within a cartridge or a disk that is manipulated without a cartridge are well known, as disclosed in document 1 (refer to paragraphs [0019] and [0020], and fig. 2) for example, and configurations wherein a region for recording information that identifies the classification of the disk is provided at a prescribed location on said disk are well known, as disclosed in document 2 (refer to paragraph [0030]) for example. In the light of the abovementioned well-known features, it would have been easy for a person skilled in the art to conceive of configuring so that information for identifying whether a disk is a cartridge-type disk

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Box No. V      **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

that is stored and manipulated within a cartridge or a disk that is manipulated without a cartridge is recorded at a prescribed location on the disks disclosed in document 1 when combining the inventions disclosed in documents 1 and 2.

The inventions set forth in claims 4 to 6 do not involve an inventive step in the light of documents 1 to 5. Document 5 discloses a technique for automatically discriminating between optical disks that have different numbers of recording layers based on the total amount of light that is returned from said disks, and also discloses a technique for recording a disk ID that identifies the classification of the optical disk. Furthermore, documents 1 to 5 all belong to the same technical field in that they all pertain to disk devices, and thus it would have been easy for a person skilled in the art to conceive of combining the inventions that are disclosed in documents 1 to 5.

The inventions set forth in claims 4, 7 and 8 do not involve an inventive step in the light of documents 1 to 4 and document 6. Documents 1 to 4 and document 6 all belong to the same technical field in that they all pertain to disk devices, and thus it would have been easy for a person skilled in the art to conceive of combining the inventions that are disclosed in documents 1 to 4 and document 6.

The inventions set forth in claims 4, 7 and 9 do not involve an inventive step in the light of documents 1 to 4 and document 7. Documents 1 to 4 and document 7 all belong to the same technical field in that they all pertain to disk devices, and thus it would have been easy for a person skilled in the art to conceive of combining

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**Box No. V      Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability:  
citations and explanations supporting such statement**

the inventions that are disclosed in documents 1 to 4 and document 7.

With regards to claims 4 to 9, the feature wherein the first recording medium and the second recording medium are configured so as to have the same recording capacity and the same number of recording layers while the third recording medium is configured so as to have a different recording capacity and a different number of recording layers from the first recording medium and the second recording medium does not impart an effect that can be considered to be significant in comparison to the effects of the inventions disclosed in the abovementioned documents, and thus the features in question are merely design matters that can be configured in an appropriate manner by a person skilled in the art, as necessary.

The invention set forth in claim 11 does not involve an inventive step in the light of documents 1 to 4 and document 8. Document 8 discloses a technical feature wherein the same file system management information is recorded in the main file system recording region and the secondary file system recording region that are provided to a disk. Documents 1 to 4 and document 8 all belong to the same technical field in that they all pertain to disk devices, and thus it would have been easy for a person skilled in the art to conceive of combining the inventions that are disclosed in documents 1 to 4 and document 8.